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Waltzing between Order and Ordering – a Social Practice Perspective

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Abstract

Organisations are often depicted as strategic intention seeking entities creating strategic objects that form pockets of order in uncertain environments. This design-based view of strategic development is challenged in this paper. The paper illustrates that organisations in building dynamic capabilities do indeed need pockets of order around which they can organise their activities, but too much order can splinter or paralyze an organisation. This is a paradox that all organisations need to pay attention to. We argue that the key to resolving it lies in how organisations perceive and employ these pockets of order, not only as the result of formal design efforts, but rather as (re-)produced, and manifested through ongoing and unfolding, social accomplishments. Strategy as outcome derives from many more sources than formal strategy. The paper thus emphasises that there is a need to work with these various sources of order that help organisations and its members in dealing with uncertain environments. However, these pockets of order are temporary, and when they break down organisations experience difficulties of accomplishing tasks. How organisations react to and incorporate disruptions (i.e. (re-)order) depends on the kind and strength of situated order producing objects and the social accomplishments enacted around these. In other words actors interpretatively relate to the organisation, as they encounter it in the form of social practices, systems, structures and people, based on which they act and produce strategic outcomes.

This paper aims to understand these social systems dynamics, which it treats as a mutually shaping interplay between order and ordering. The paper illustrates this interplay through two case studies concerning two small and medium sized companies' efforts to enable strategic change. We find that potentially stabilising objects are underutilised as part of the ongoing ordering process, because they are generally treated as fixed objects rather than as common ground for negotiation and thus dynamic capabilities.

Introduction

According to Boulding (1956) organisations rank among the most complex systems imaginable, due to a number of characteristics related to social systems. Among these we find three particularly related to this paper, (1) in social systems, stabilising forces are temporary and small inputs can lead to patterned, but unpredictable consequences as it is most vividly suggested in chaos theory (Stacey 2003), (2) the system may experience delayed and unintentional consequences as suggested in system theory (Merton 1957), and (3) organisations develop symbolic images of the world and behaviour based on them (Daft & Weick 1984).

Organisations rely on sources of order to develop from, as they serve to reify developmental trajectories in an organisational setting. However, at the same time these sources of order are continuously employed in changing developmental trajectories, which means that existing sources of order engage interactively with situational characteristics to produce a new sense of order. It is this interaction between order and ordering this is the sentiment that we aim to unfold in this paper. we may ask how is order produced in an organisational setting given the characteristics of new forms of organising characterised by a low degree of internal stability, a high sense environmental uncertainty and ambiguity, loose couplings between interdependent agents, greater permeability of organisational boundaries, shift to knowledge as key resource etc., this remains a key question.

In the last decade, there has been a large effort to improve the efficiency and effectiveness of knowledge intensive work. The main bulk of these efforts can be found in the reign of project work (Cavaleri & Fearon 2000) and new forms organising (O'Reilly & Tushman 2004; Pettigrew et al. 2003). With few exceptions this concern has focused on establishing a systematic and manageable work process, whereas the substance that holds the organisation together, in the form of social practice (Jarzabkowski 2005), sense making (Weick & Quinn 1999) and technologies in use (Orlikowski 2000) has been less well explored as an integral part of the knowledge intensive organisation.

According to Schön (1983), the practitioner must do a certain kind of work to make sense of a seemingly senseless situation, which involves a reflective dialogue with the situational characteristics. Plato also dealt with this basic problem of searching for meaning. He argued that, if one looks for wisdom, one can only find it if one already knows what to look for. If not, one cannot recognize it even if one would stumble over it. This paradox illustrates how we need elements of order to make sense of novel situations. This is also recognised in the continuous improvement literature, where it is emphasised that one needs order in the form of a standard to work from in order to be able to improve (Imai 1986).

In a world determined by uncertainty and ambiguity, organisations need to find sources of order around which they can navigate their strategic development, but also provide their staff with a sense of direction, progress and achievement. Often, however, we place too much emphasis on the randomness of strategic outcomes, and forget that every organisation comes with a number of inherent attractors, which enable ongoing activities. In most organisations we find a capacity to deal with everyday challenges, which is, however, often difficult to describe or formalise as it is tacitly embedded in the organisation. The problem, however, remains that organisations thrive on their ability to reorient their activities through a set of dynamic capabilities. Only, we know too little about how these capabilities are formed, how they unfold in organisational practice, or how they evolve. How, then, can we know how to approach a strategic reorientation of the company?

Teece et al. (1997) define dynamic capabilities as ‘the ability to integrate, build, and reconfigure internal and external competencies to address rapidly-changing environments’. The concept of dynamic capabilities arose from a key shortcoming of the resource-based view (RBV) of the firm (Barney 1991; Barney 2001). The RBV has been criticised for ignoring factors surrounding resources, instead assuming that they simply “exist”. Considerations such as how resources are developed, how they are integrated within the firm and how they are released have been under-explored in the literature. With the concept of dynamic capabilities an attempt is made to bridge these gaps by adopting a process approach: by acting as a buffer between firm resources and the changing business environment, dynamic resources help a firm adjust its resource mix and thereby maintain the sustainability of the firm’s competitive advantage, which otherwise might be quickly eroded. So, while the RBV emphasises resource choice or the selecting of appropriate resources, dynamic capabilities emphasise resource development and renewal.

Order producing attractors – the constructs of waltzing

Like the waltz, organisations contain scripts that bind the organisation to a development path. One major force is the concept of the attractor introduced in chaos theory (Levy 1994; Lorentz 1993). Complex systems often seem to run through some kind of cycle, even though situations are rarely exactly duplicated and repeated. The knitting in this cycle is the attractors that are part of the system as elements in or around the organisation, which due to their critical mass serve to hold it on a given trajectory where it has found a form of equilibrium. However, the attractor also represents the outward manifestations of self-organising, where the organisation with the ongoing search for new configurations based on situational factors. In its everyday manifestation, chaotic organisational dynamics are attracted by 'islands' of relative stability (attractors), which members of an organisation relate to as core elements of sense making when they act within a sea of chaos. These islands of dynamic stability represent specific kinds of settled organisational activity (for instance, activity oriented towards technological innovation, market share expansion, introduction of new products, etc). Each kind of activity represents a specific pattern in overall organisational dynamics. One cannot predict exactly how a given kind of activity will evolve in time, as a dynamic system does not pass through the same situational circumstances twice, which means that direct replication of previously successful activities will not necessarily produce success in the future. This leaves some questions unexplored:

- What are the forces locking a company into its existing attractor pattern?
- If change is required, how is the transition achieved with basis in a given attractor and what happens as new attractors emerge?
- How are the ground rules of the new attractor established?

Within given attractors we will find a number of objects, which serve to constitute the attractor in a practice setting and which connect different attractor sets. Here, the concept of boundary objects may provide a useful supplement. The notion of boundary objects was developed in actor-network theory (ANT) (Star 1989), but has also been taken up by Wenger (1998) in his conceptualisation of communities of practice. In ANT, a boundary object "sits in the middle" of a group of actors with divergent viewpoints (Star 1989: 46). Boundary objects circulate through networks playing different roles in different situations. They are not merely material; boundary objects can be 'stuff and things, tools, artefacts and techniques, and ideas, stories and memories' (Bowker and Star 2000: 298). For Wenger (1998: 107) boundary objects work at the edges of communities of practice mediating their external relationships; 'they enable co-ordination, but they can do so without actually creating a

bridge between the perspectives and the meanings of various communities'. The boundary object thus serves to hold the organisation together and as a means to establish bridges to the environment. Boundary objects are an entity shared by several different communities, but viewed or used differently by each of them. As Star points out, boundary objects in an organization work because they necessarily contain sufficient detail to be understandable by both parties; however, neither party is required to understand the full context of use by the other - boundary objects serve as point of mediation and negotiation around intent.

In summary this means that order is produced in the interplay between social/physical structure, change recipient and situational factors, and helps us grasp some of the complexity and thereby make our knowledge actionable. Hence problems become problems because they appear in a specific context where they challenge existing ways and beliefs, which enables the organisation to recognise them and start to think of them as problems.

The dynamics of attractors – Waltzing between order and ordering

Weick's (2001) work on organising and sense making has contributed significantly towards efforts in organisation theory to explore organisation as process. His discussion of the relationship between verbs and nouns in particular has served to highlight central dynamic features of organisations. In order to develop a better understanding of the dynamics of organisational attractors, we propose to draw attention to the formation of order producing nouns and how the process (verbs) shape objects (nouns) and vice versa. Exemplary of the noun/verb relationship are the well known constructs: organisation vs. organising; innovation vs. innovating; performance vs. performing; strategy vs. strategising. Although Weick introduces fluidity to the image of organisation he recognises the importance of dealing with the interplay between order and ordering: "Small, subtle pockets of order occur in several places. Order resides in timing, participation, ideology, language, shared images, overlapping individual goals, stable a priori preferences, and a consistent environment for the game itself ... Organizations may be loosely coupled, but they are loosely coupled systems. Organizations may resort to garbage can decision making, but garbage cans have borders that impose some structure" (Weick 2001: p. 349)

Order producing objects mitigate the dynamic effects that produce structural oscillation. In evolutionary theory this has been addressed as path dependency (Nelson & Winter 1982), in actor network theory as actants (Latour 1997) and in the social practice perspective as boundary objects (Brown & Duguid 2001; Wenger E. 1998)). However, organisational activity is a social enterprise,

requiring the commitment and coordination of a network of actors. Consequently problem setting becomes a process of negotiation in which diverse worldviews are confronted. According to Wenger, negotiation is an ongoing process of reification, which embodies participation in conjunction with the production of reifications of how we do things around here. Furthermore, *"[b]y living in the world we do not just make meanings up independently of the world, but neither does the world simply impose meanings on us. The negotiation of meaning is a productive process, but negotiating meaning is not constructing it from scratch Negotiation of meaning is at once both historical and dynamic, contextual and unique"* (Wenger 1998: p. 54).

Actors experience particular activities as being part of a larger network of activities, which helps to shape their understanding of the situation. Negotiation is, therefore, the process of establishing a dialogue through which actors continuously shape and reshape their constructs of meaning. Hence negotiation is a social process, yet it need not necessarily involve actors directly in conversation, but can to some degree substitute this with objectified means of order. Wenger neglects this agency of physical artefacts (technologies, systems, structures etc.), which also play a vital part in this negotiation process and further often sets the boundaries of what can be done.

With this paper we aim to explore the strategy making objects that frame social interaction and establish organisational order and cohesion as organisations are heading for an uncertain future. Thus focusing on the effects of the continuous cycle of order – disruption – ordering. The research question explored in this paper is: *how are order producing objects unfolded and absorbed in the social life of organisations?* This is not only related to the relationship between individuals and the formal organisation, but also to the symbolic images of the organisation and its artefacts (Hatch & Schultz 2002).

METHODOLOGY

The findings reported in this paper are based on longitudinal case studies of two knowledge intensive companies, each going through a strategic repositioning process (Soerensen, 2005). In studying ongoing phenomena, the methodological framework introduced by (Pettigrew & Whipp 1991) is a strong source of inspiration. It encourages us to consider elements related to context, contents and process and to look into the interplay between these elements as illustrated in Figure 1. We have identified a number of key events in each of the two companies that formed the outset for new strategic trajectories, which we have followed through the content elements introduced to the

company (in the form of new systems, new strategies, new structures etc.) in the course of time, as well as the process through which these content elements are related to the existing organisation.

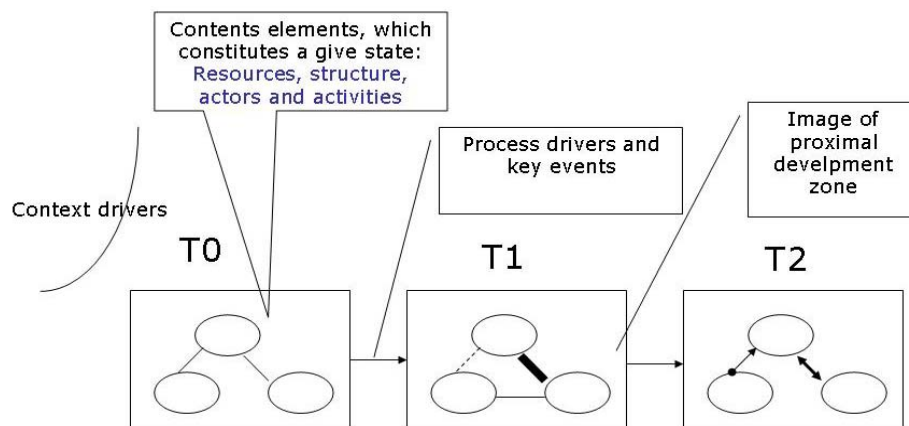


Figure 1 studying context, contents and process elements underlying strategic change

We applied a practice framework for studying strategy as a situated phenomenon mediated by social and structural means (Jarzabkowski 2005), which led us to look into the order producing effects of strategy making objects (such as plans, organisational designs, etc.), while recognising that these objects rely on the sense people make of them. Thus focusing on studying “technologies in use” (Orlikowski 2000) exploring the active use and images developed of objects into consideration. The emphasis thus turned from strategic events to *strategic episodes*, defined as sets of social interactions explicitly oriented towards the production of a strategic objective (Balogun et al. 2003). Balogun et al. (2003) argue that we in studying these processes face contradictory pressures, related to the need:

- To develop rich descriptions of institutionalised “praxis” and unfolding situated “practices” while providing an understanding of the practitioners engaging in these processes.
- To cover a broad enough field, not necessarily to generalise results in a traditional sense, but to cater for the cross contextual nature of praxis as a field of study.

To deal with these issues data, about key events and their constituting elements and participants interpretations of these, was collected through participatory observation, supplemented with document studies and interviews. This method was adopted to provide a rich case-based insight into the everyday functioning of the two organisations and a situated understanding of the research phenomenon as it unfolded. The companies were selected for the study according to the following criteria: (1) they were undergoing strategic change; (2) they were based in different industries, to

embrace various business contexts; (3) the findings must have some legitimacy in the industry (this was checked by comparing them to shallow case studies conducted in the same industry).

CASE 1 – Software Ltd.

This case concerns a medium sized IT company, in this paper called Software, which was followed through daily participation by one of the authors during a period of seven months. The company produced software products for manoeuvring in complex information systems. It was established in 1996 and had nearly 100 employees. Hitherto, Software had had little problems in convincing potential investors and other stakeholders of its potential. It had lived on its ability to come up with new ideas, as it was positioned in a “greenhouse” where it had to a great extent been sheltered from the competitive environment. The company had primarily focussed on the development of a technological platform, which should provide them a strong position in the market. However in this process there was much confusion as to what position the company should focus on and how it should do that. Yet according to the management this drifting focus of activities was a normal consequence of manoeuvring in uncharted waters. However, the company slowly but surely approached a new reality, which meant that the demands from internal as well as external stakeholders increased in terms of 100% completion of products, maintenance, service and economic surplus. This highlighted the need to establish professional practices, which became a dominant force as Software approached what could be called a "new reality".

The general logic in the company was that of an urgent need to grow, and the company did so by hiring about 20 new employees every year. In the fall of 2000 the company had nearly 80 employees and suffered severely from a lack of physical space while it began to experience some problems with communication and co-ordination at the same time. Furthermore, Software had a strong development tradition. The core belief was that the company should and could produce the world's best product. Although it was more than difficult to live up to this ambition, management continuously confirmed this belief by telling success stories. These success stories were produced in interaction with customers, investors and by small bench marking exercises. Although these stories were not fully reliable, they served to justify work and cost incurred and, therefore, helped to legitimise staff as well as management.

The belief in "pursuing the best" had both advantages and disadvantages. On the one hand, it served as a strong motivator to staff. One employee said: *"Here I have the chance to be part of something great, I am not going to let this opportunity pass me by"*. On the other hand, this belief proved to be

a trap as projects became ongoing activities, which were difficult to stop, because there was always room for improvement from a technical point of view, whereas added consumer value was rarely a major concern. One top manager noted: *"This whole company is development oriented. Even Sales are more occupied with what will come next than with selling what they have to offer now"*. Everyone was always chasing new projects and as priorities seemed to shift continuously, it was very difficult to finish ongoing projects.

At this point management realised that there was a need to develop towards a more professional organisation as it was termed. This was initiated through a range of different initiatives. First it was decided that there was a need for a new organisational structure, which introduced a layer of middle management (Figure 1) and aimed to build an effective delivery system. Second it was decided to establish a process improvement team consisting of a middle manager, a secretary and a researcher. The team reported to a steering group, consisting of top management and an external consultant. Although the company had already taken steps in this direction, as it had worked with the Capability Maturity Model (a software development and improvement approach) since 1999. Yet it had by its own account failed to integrate these practices effectively. This case will have these two transitions as its point of departure.

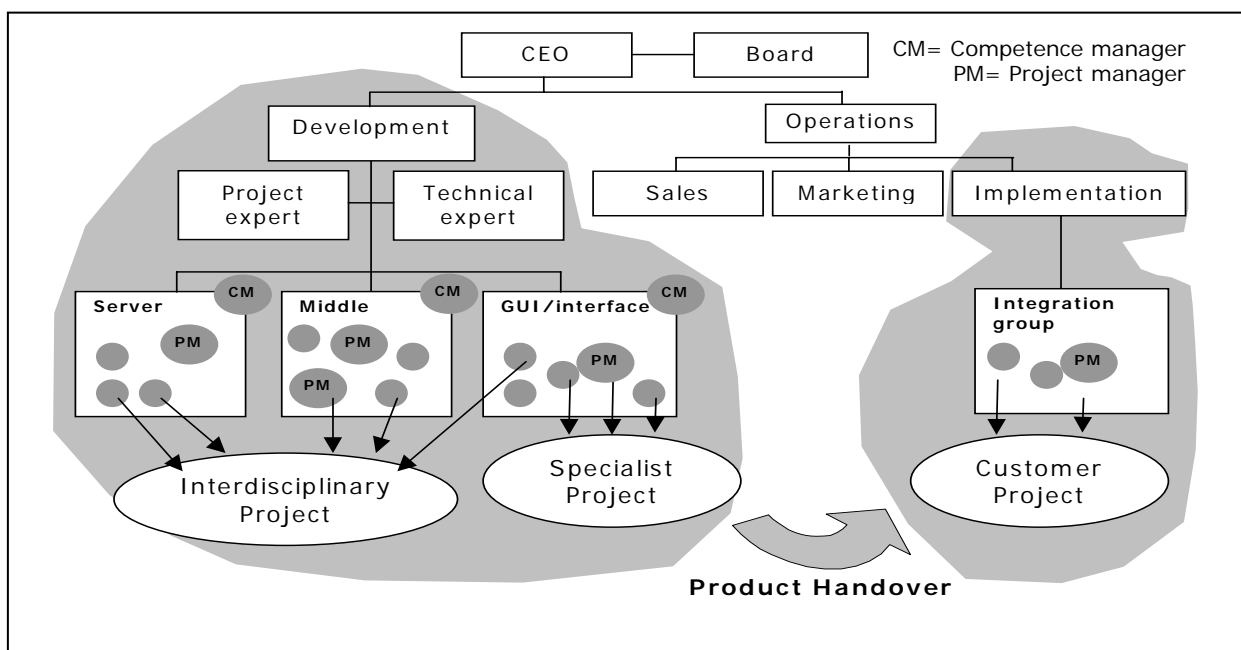


Figure 1 – Software's modular organisational structure

The professional organization and its measures – reorganization and process improvement

Due to rapid growth in staff it became difficult to oversee all activities. With the growth of the

company a larger diversity in terms of functions and types of people had been introduced. Whereas Software used to be a highly integrated entity it slowly became a multifaceted working environment. This started to put heavy strains on the culture and the shared understanding of what the company was all about. The management group discussed these issues during an external two-day seminar. The conclusion was that there was a need for co-ordination and communication as well as an increased awareness of the mutual dependencies between and across various functions and activities. It was decided to restructure the company and to divide Software into two major departments, development and operations. The main reason for doing this was an experienced pressure to establish an effective sales and operations system, which could take care of the customer interface that was starting to cause major frustrations for developers. In addition it was decided to establish an effective development system with clear lines of authority and task responsibility. The interaction between the two was envisioned as a trapdoor that would open and close whenever a new product was available. This, however, later proved to be impossible to execute in practice, as there in effect was a continuous conflict about when a product was finished and how and by whom it should be serviced after it had been handed over. Often it also proved to be difficult for sales to understand the products, which meant that developers often had to hand-carry the products to the customer.

The other main consequence of the reorganisation included the construction of three competence groups based on the modules in the software development, the server layer, the middle layer and the user interface layer, respectively. The groups were constructed on the basis of intentions such as improving the uptake of new employees, establishing a learning and problem solving community and developing a middle management system.

The groups were very different and used different modes of organising. The server layer group was a small and integrated group and mainly consisted of established members of staff, who had a long educational background and worked with a high degree of autonomy. This group was considered as the research and development section of the company and was placed in an office in another part of the town. The middle layer group on the other hand consisted mainly of relatively new members of staff, with short to medium long educational backgrounds. This group was led by two established members of staff, who had been appointed project managers recently. The group was considered as the finishers who should make developments functional to the customer and did so to a large extent by developing standardised frameworks. The user interface group was thought of as a support function to the two other groups. Most of the newcomers to that group complained that they did not

have enough work and that they felt rather stressed by this fact. They could see that the established actors were more than fully booked, and therefore felt they were not able to make a contribution. Newcomers were activated through small insignificant projects meant for them to learn about the technologies and methods of the company. However, most of these projects never amounted to anything and they were often abandoned at a relatively early stage. The newcomers were never integrated in the core processes and therefore remained peripheral participants although a structure had been established which had integration as its main purpose. As a consequence people got stressed because there was not enough work.

The groups only worked on paper, with the exception of the server group, which due to its long standing nature had well established internal coherence, while its new external relations suffered from their highly unsettled nature. In real life the groups and their proposed relations were empty shells, and their only function seemed to be that a clearer line of authority had been established, although this still was a constant source of confusion as most of the projects were cross-functional and, therefore, involved several managers. The organisation seemed to forget that groups take some effort to establish and was in particular unaware of the interface problems between layers in the software development process that the new structure had created. This came as a surprise to everyone who thought that problems had been taken care of with the structural measures taken.

Management soon became aware of the problems and initiated a range of structural measures to deal with them. The main initiative was the establishment of a project office, which initiated process improvement initiatives to establish what was termed professional practices in projects. This included a range of different tools and methods that should help project groups overcome some of the co-ordination and communication problems. Project review meetings took place on a weekly basis as did meetings in the so-called development group, which consisted of senior and middle management, a group of 6 people, which was meant to focus and direct development activities. An Intranet and other forms of ICT were used intensively as a communication platform. Each project had its own homepage, which was used by the project members as a working platform and also to keep others informed about developments. And finally a development plan was written up with demand specifications for each project. Yet the process improvement group soon had to realise that staff members mainly saw these initiatives as needless administrative overhead and generally failed to see how the initiatives would help them in their daily work. They still experienced a chaotic working day with lots of new issues to grasp and new priorities for their work.

An argument that often came up in the discussion was the complexity of the work and the environmental uncertainty that the company continuously faced and which made it impossible to plan more than 14 days ahead. "*We need to keep our options open and be able to act according to the contingencies we meet*", senior management argued. To the staff this often looked like a bad excuse for not taking the time to manage. Staff continuously looked for a logic to guide them through their work but continuously found that priorities had changed and often experienced that their work had been wasted effort, or that it did not live up to the requirements of modules produced by other project groups. This search for logic rendered the creation of a development plan. The plan aimed to deal with the problem of the interface between the three layers in the development process and in particular sought to create some level of certainty and order in the development department. Yet it was soon realised that neither management nor staff were about to change their ad hoc based working methods. Priorities continued to shift as people met in the hallways at lunch etc., rather than in the formal meetings that had been set up to deal with development planning. In fact staff had even invented a word "binary management" to describe management commitment and attention at Software Ltd., which was experienced as either 110% or 0%. The management group carried the image that staff would like strong and ever visible management that was able to guide them through all the troubles they had. Soon, however, this, developed into a relation based on fear, because the perceived distance between the management group and staff increased as the company grew while management kept doing what they had always done – solving problems.

Software Ltd. did in fact have a strong community feeling (although it had several groupings), which had its foundation in a profound technology fascination. There was a strong sense of helping each other and there always seemed to be someone to turn to and help solve a specific problem. The problem, however, seemed to be knowing what others were doing and figuring out what implications this had for one's own work. This often meant that groups had to make several versions of the same module to fit to the specifications of a product and this was not discovered until the product had been handed over to the next level. In other words, there was a constant flow of problems on the interface between modules of the software product, produced by misunderstandings between groups. Therefore there seemed to be a tendency that members felt that they belonged to fractions of the organisation rather than to one large family. In particular, this was obvious in the relationship between the server group and the rest of the organisation. This group was convinced of its own abilities and did not really believe that anyone else could make a significant contribution. Although co-ordination seemed vital due to the interconnections between

deliveries, this was seldom taken seriously or thought to be much simpler than it proved to be in practice. Although there were plenty of specifications and meetings there was limited room for communicative action in the new modularised structure, and thus very little to help actors establish a common platform for working. Priorities constantly shifted and project groups were often told to drop everything they were doing in order to put their full attention into something new, while other groups that were dependent on the module were put on hold until the first project group could resume their work. In effect, deadlines were still exceeded by many lengths and the intention of seamlessly linking different streams of activity was not realised.

CASE II – STRATEGIC REFOCUSING AT SERVICE LTD. AND THE ROLE OF THE NEW FINANCIAL SYSTEM

The second case takes its outset in a service company (approx. 100 employees), working with improvement and simplification of administrative processes primarily in the public sector. The company has traditionally approached change by applying an explorative development strategy where cross-functional dialogue, participation and co-operation have been key virtues, and by aiming to integrate a sense of responsible management practice in every member rather than using rules and procedures. These were seen as important elements for building a receptive culture where every event was seen as a learning opportunity. This style was highly tied to the managing director, Eric, who had been with the company since its early years. However, the company had been under serious financial stress since the early 90s due to a series of unfortunate business adventures, and was under pressure to perform.

In 1998 Eric decided to introduce Chris as his successor. Chris joined the management team together with Eric, in order for him to get to know the company and vice versa, and Eric slowly started to step back and did so formally in 2000. It now became Chris's primary task to produce a "more stable economic situation". Chris knew that he was in for a larger reorganisation task. The most compelling reason was that the company was facing a large challenge due to technical erosions where the primary cash cow was losing ground to new electronic solutions. Further Chris soon experienced that staff did not seem to understand what was happening to them and were running in different directions, trying to pick up the pieces of a puzzle that no one seemed to know the structure of. Furthermore, the functional areas rather than working with each other tended to be drawn into their own way of thinking. This had resulted in a rather heterogeneous service portfolio ranging from printed napkins to complex software solutions.

Having realised that this complexity was part of everyday life in the organisation Chris noted: *“If things got too chaotic Eric was able to stand up on a beer case and speak to people and they would listen, with his very presence he had a capacity to pull people together. I do not have that capacity and therefore I need new means to manage”*. One of these new means was the introduction of a new financial strategy and system.

The introduction of a new financial system

First of all a new experienced director of finance was appointed. The financial management of the company was notably in a poor state. The person in charge so far had no experience with running a financial department and as the company had no tradition of financial measurement the job had not been easy. In fact the old management group had perceived financial management as a potential blind trap, where individuals would be prone to sub-optimisation rather than engaging with the system as a whole. Most of the financial management was decentralised to the individual project managers, who reported on an irregular basis. It was only when things went wrong that management would mediate by turning events into learning opportunities or in the worst case scenario lay down tighter structures. The finance department was therefore an ex-post data collection entity, with little scope for engaging in the business process. According to the new director of finance, it suffered from a lack of structure and the reputation of the department in the organisation was very distrustful, everything was and could arguably be questioned.

The first challenge was to establish a set of internal procedures for financial management. A project group with members for each of the company's sections headed by the financial director was set down with the aim of exploring what could be done. The hope was that this would raise the level of financial awareness in the company. First of all it was decided to introduce a new financial system, to increase detail and transparency in financial dispositions. Further a larger discussion was initiated of how the department could become capable of engaging in the decision-making process, which was the perspective the new financial director was taking on financial management.

Initially little effort was put into justifying the new system to staff as project members were expected to carry the system into their respective sections. However, things did not go like that in practice, rather it was introduced as a fact that staff had to accept and adopt as part of the new overall management system. The staff reacted in many different ways. Some blankly refused to use it, they generally saw it as a sign of distrust, a waste of time and as an administrative overhead – “it has no relation to our practice”. Others bypassed it – “we have just not got around to doing it yet”,

while another group adopted it – “we have used such systems before, they give us good accountability”. Hence the argumentation given was diverse and the different views clearly affected the role of the system, right from legitimising activities to cheating the system.

One important issue that eventually came to drive the introduction of the system, was the overall strategic reformulation of the company, where it was realised that the system had an important role to play. Staff slowly gained confidence in the system and the results were used as a platform for this dialogue. Tough, but necessary, decisions had to be made about the future of large parts of the product portfolio – that was clear to everyone, but how and what was not. The management group used the records to legitimise and guide the discussion, which meant that the system obtained a constructive role. Hence the increased detail and accuracy in the financial accounts were used to have dialogues with staff about the soundness, efficiency and development of activities. Hence the department took on a much more proactive role than the company was used to. This increased insight into the financial aspects of activities had a large effect on priorities in the company, potential activities were put under much tighter scrutiny before initiated, and they were continuously monitored to ensure profitability. A side effect was that it made people cautious about the development of their own business area, engaging them more actively in the debate about the future profile. Chris noted that this process of engaging people in strategic decisions was not always nice, but it was necessary. All he could do was to ensure that the process did not get ugly, but that it retained a sober and factual basis, facilitated by the new financial system. Staff slowly started to experience the effect of a working finance department, and discovered new ways of developing their business areas as it canalised creativity towards legitimate focus areas. This also meant that collaboration was legitimised and the awareness of using each other across functional divides became clearer.

Service Ltd. was and had always been a company highly dominated by participative management practices, dialogue was seen as far more constructive than systems and structures. These would mainly invade and corrupt the constructive dialogue between people. Co-ordination was dependent on the charismatic leader, ongoing communication and mutual activities. As this started to break down – due to radical changes in the product portfolio, new management and staff turnover – a loss of meaning was experienced across organisational levels. The initial intention with the new financial system was to improve the financial transparency of the many ongoing activities, which it did, but slowly it also took on a mediating role in the overall restructuring of the company. Management used the system to guide the dialogue and staff used it to develop and co-ordinate their

activities. The system entered the ongoing construction of meaning as a legitimate guide rather than as a coercive element.

Discussion – Dynamic interrelating of order and ordering

The two case companies' search for more appropriate forms of work opens an avenue to discuss three issues, which underlines the research question:

- What are the main attractors and how do they relate to an ongoing organisation?
- How do they instigate change and change themselves?
- How do they affect developmental trajectories?

Based on the cases there is some merit to the suggestion that disorder and chaos are intrinsic properties of organisations, rather than some temporary unbalance, there seem to be constant disturbances generated internally as well as externally. Active in dynamic internal and external environments, the case companies were highly dependent on their capacity to work with the dualities and controversies that seemed almost omnipresent in their activity. With the event of frame breaking change the companies became dependent on working with dualities as a means to supplying sufficient substance to the strategic reorientation they were pursuing. This capacity represented an ability to unfold and absorb new meanings through social as well as systemic representation and employ these in linking diverse lines of activity. The order from which actors built their activity came from many different things, it is not just based in superimposed structures (like the financial system, or organisational design), but also in the situated sources of meaning employed by actors in dealing with their everyday work. In this sense the sources of order may be scattered and local, and it may indeed include only few people for short spans of time, as we e.g. saw it in the standing work groups of both of the companies.

The cases also showed a number of attractors that had a formative effect on the interrelation between individuals and organisation. Software and Service were caught between diverse attractors. It was, however, experienced by the companies that the formal objects introduced were continuously confronted by established social practices, which enabled and constrained social actions:

- Physical objects in use; eg. in Service the financial system was imbued with actor generated interpretations and practices of objects, in Software technology played an important role,

which was primarily strong in the server group, whose relationship with the university strengthened this attractor.

- Historically generated (institutions, path dependencies, cultures, mindsets); eg in Software the self-perceptions and previous histories played a major role in shaping how actors experienced their work and each other. And the emerging market orientation, which was primarily represented in the operations section of the company, which was also pushing parts of the development section into this attractor, through recently established customer relations.
- The new organisational structure and its supporting division of labour and process improvement initiatives.
- Intentions personal as well as social; in both companies many intentions were present among these were the drive to make a difference, protecting personal turf, and official repositioning of the companies.
- Projects acted as the key attractors in both companies, actors built a sense of belonging and professional comfort within the reign of the project. Ongoing projects served as boundary objects, as specifications were continuously revisited and discussed they started to serve as a basis for mutual understanding across the companies.

First of all this challenges the assumption of a direct link between organisational level intentional efforts and their outcomes, and puts more attention to how this process interacts with social practices. In the cases a number of these attractors have a role in shaping strategic thinking and enactment. In understanding how micro-level activity shapes organisational outcomes the central task is not to map out all the small effects; rather it is a question of understanding those elements that supply significance and meaning to the ever-unfolding organisation. *Second*, this also means that we need to recognise that nobody possesses an overseeing mind or has full control over all the constituting elements of the organisation, but that the organisation works as a distributed system. This demands integrative efforts, but in this pursuit we are frequently reminded that organisations are inherently bounded in this sociality, which produces weak connections among units of the organisation. These weak connections may be traced back to the way in which purposeful design works, but also to the situated social dynamics that emerge in any organisation over time, which prompts people to relate more to one group than another.

As the two case companies' search for more appropriate forms of work many of these issues are illustrated. The management in both cases were highly concerned with the process of establishing

new working relationships through a number of different mechanisms (structure, system, rewards etc.), which had different impacts. Still they had to realise that these artefacts did not mean much to people and had limited impact on what was going on in the daily practices. In the cases we find a meeting of two types of structure - the designed structure and the emerging structure of practice. It was clear that the formal designs did not provide sufficient substance to hold the organisations together, and practices had also been disturbed. With a lack of these integrating factors from an established productive system, the cases indicate that there may not be enough substance to hold the organisations together.

The cases provide examples of the function or dysfunction of these organisational means to coordinate and direct complex streams of activity. In the Software case, this was illustrated by the interaction between various sections and groups of the company, which were more interested in going their own ways than collaborating in order to create better solutions for their mutual customers. Throughout its history, the company had prioritised the establishing of coordinative forums, where actors would meet to discuss their relations; but these discussions increasingly became competitive arenas, as slack resources got scarce. These tensions were intensified by the reward system (share bonus system). The reward system was largely based on people making themselves irreplaceable by pursuing own interests, and it even encouraged this. The lack of a stable platform, on which to build specifications, was highly visible in the Software case; everything functioned by means of informal agreement and constant local negotiation. The Development Master Plan was introduced as an instrument to change this, as it was intended to lead to the process being formalised and priorities being brought out into the open. But it was never fully accepted or integrated in decision-making discussions, and thus little was done to connect the many different strings of activity or getting these processes out into the open. The company lacked a clear vision of what it should be, and how this could be realised. In awareness of this management initiated a large-scale strategic exercise supported by a large international consultancy company. Furthermore, it failed to create clear and unambiguous specifications of the interactions between the various stages of the production process, which led to mismatches between interdependent product components.

In the Service case it is illustrated how people form opinions and judgements about development initiatives before and while they engage with it, and that these opinions and judgements will have an effect on the role that systems come to play, and these initiatives shape activities. Our pre-understanding is tested in the dialogue, where it fuses with the present and forms the frame of

understanding that we employ in future situations. This engagement between lived world and systems is central to the success of development initiatives. Too often, initiatives just seem to be laid on top of existing systems and do not become embedded in lived world, because they are only experienced through their coercive effects and not as something that can facilitate activities.

The companies experienced a number of problems as it dealt with inconsistencies, where we find numerous self reinforcing collapses in sense-making, which lead to failures of the companies to effectively enact intended strategies. Both of the case companies were living through a breakdown of organisational identity, due to shifts in the competitive context, which challenged previous attractors such as their technology, core processes, management systems and competencies. This led the fairly coherent organisation to disintegrate. The limited collective experience of new actor networks resulted in insufficient social matter to hold the organisations together and to bring its' constituting elements together in a new mode of working. This may be explained though the multiple unsettled attractors at play in each of the companies (new systems, new structures, new working relations, new images etc.), which were bringing inconsistent cues into the ongoing organising process and opening-up a gateway for selective interpretation. In other words multiple voices competing for a share of mind in the companies, contribute to an increased differentiation of organisations.

There are multiple attractors within and around an organisation, which may not make change patterns predictable, but which provide it with a set of mitigating measures. These measures provide a platform for dynamic capabilities, as they provide a sufficient level of order for people to take action and to ensure sufficient coherence between different lines of activity. In Software a post-mortem review process was initiated to enable distributed project members to revisit the project process and outcomes, but also to enable a better mutual understanding for future activities. This gave the project team and its various stakeholders a chance to review, but it also provided a forum for future negotiations and resolution of interdependency issues.

With the event of frame breaking change the interactive mode of ordering is a necessary, but insufficient form of strategic development. As we have seen it has its clear limitations when credible, legitimate, and actionable alternatives have not yet emerged. Still in these situation organisations do have their sources of order, which may be brought into play to assist the sense making process. They are just less explicit than when they are represented in a hierarchical image of organisation, and their effect needs to be experienced due to their processual nature. One major

problem remain that companies fail to recognise the dynamic potential of objects, and therefore do not work with them as boundary objects, but more as formalised and stable objects. The associated need to this is to recognise that strategy is about establishing future patterns of activity. This means that it is not enough that we evaluate it on the basis of its current performance; we need to evaluate it on the basis of the ongoing activities that it is meant to support. Hence, development efforts must be experienced and embedded in the organisational context. Evaluation of initiatives should not take place before at least the majority of the members of the organisation have some experience to draw on. Patterns of organisation are not only “instruments”; they are also a part of peoples’ everyday life, which must be experienced to be understood.

Conclusion – waltzing between order and ordering

Chaos theory supplies substance to the idea of emerging organisational properties. While it illustrates the problematic nature of long term planning, it opens an avenue of research into the numerous attractors, which often are found in the situated understandings of actors and in the means that they draw on to do their daily work. From these sources of order patterns can be discerned and enacted by knowledgeable managerial intervention. In this sense the metaphor of waltzing is quite relevant for a number of reasons: (1) because it introduces the close hold between dancing partners, as a means for harmony and mutual adaptation between management and employees (2) it is bound by a set of structures, which holds the dance on a set trajectory (3) improvisation is limited, but occurs in the meeting with other dancers and in the small moves that may push the dance onto a new trajectory, due to shifts in tempo. Still the art of waltzing between sources of order and processes of ordering seems less well-ordered than the imagery of waltzing would indicate. Dances between individuals and dances between the formal organisation and the life lived within it, are challenging. Yet it has a number of attractors, which provides the make up for dynamic organisational capabilities. We have examined these attractors, and illustrate their inherent dynamism as boundary objects in ongoing negotiations.

The tendency to put too much emphasis on randomness in strategic outcomes is risky because it strengthens the call for formalised strategic efforts. Organisations are imbued with order producing elements, which have formative capacities (see figure 2). These sources of order, however, remain unrecognised as their properties for driving strategy remains tacit and situated in nature. It invites managers to rethink the nature of order and organisation, by pointing to their emerging properties,

rather than seeing them as products of structural means that can be superimposed on a given situation.

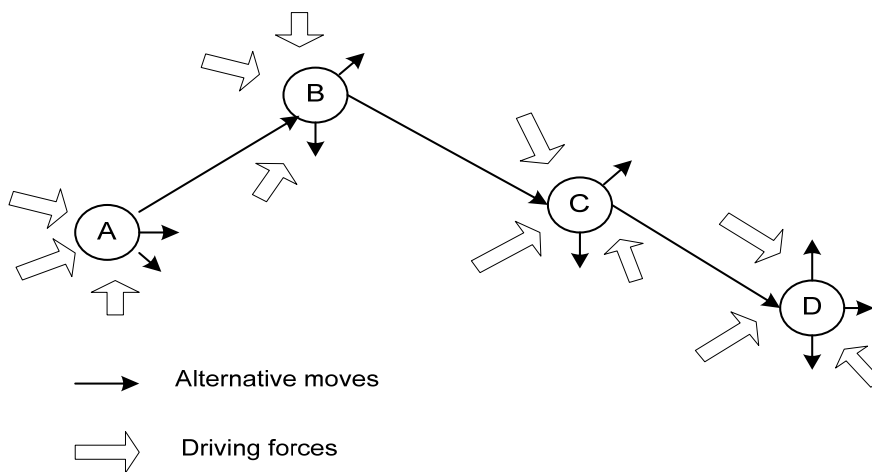


Figure 2 Developmental trajectories as a consequence of dynamic attractors and multiple driving forces

This challenges the assumption of a direct link between intentional efforts to design the organisation and their outcomes. While dramatic change may evolve unexpectedly from the interaction of many small drivers, the central issue is not to map out all the small effects; rather it is a question of understanding those elements that supply meaning to the unfolding organisation and to discern the underlying trajectories driving it (see figure 2). Established attractors potentially influence strategic development in a number of ways: (1) by creating an obstacle/trigger for strategic intent, (2) by restricting/supplying resources needed for change, (3) by restricting/supplying coordination across units, and (4) by serving as a symbolic frame of reference against which change needs and initiatives were evaluated. These points supply a central pathway into understanding the effects of social practice on strategic organisational development. First, by illustrating how micro-processes shape organisational macro-outcomes to an extent that managers often are not aware of, leaving management more or less inattentive to, or unaware of, the consequences of their actions and, therefore, also incapable of managing these outcomes. Secondly, by supplying an entry into working with strategy as situated activity, drawing our attention to what strategy does, rather than only focusing on what it is seeking.

However, as illustrated in the case studies, organisations have a tendency to be caught between different attractors, which have varying influences on different audiences. It is the balancing of these different attractors and their significance to different audiences, which becomes a key managerial task during organisational change. It must be acknowledged that organisations are

distributed rather than monolithic entities, due to the distribution of knowledge and the lack of an overseeing mind. As such we clearly need a better understanding of how micro-level ordering processes affect strategic outcomes. Particularly how a little strategy can go a long way in reorienting the organisation, if it manages to connect with central attractors. In this capacity it may serve both in terms of mitigation of a complex organisational reality and in the facilitation of further development.

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